
Zeitschrift für Physik A Atomic Nuclei

Editorial Board:

P. Armbruster, Darmstadt
E. Bodenstedt, Bonn
J. Deutsch, Louvain-la-Neuve
B. Herskind, Roskilde
C. Ngô, Gif-sur-Yvette

B. Povh, Heidelberg
G. zu Putlitz, Heidelberg
H.J. Specht, Heidelberg
W. Weise, Regensburg
T. Yamazaki, Tokyo

Editor in Chief:

H.A. Weidenmüller, Heidelberg

Unter Mitwirkung der Deutschen Physikalischen Gesellschaft

Recognized by the European Physical Society



Volume 330 · 1988



Springer International

Founded in 1920. Edited with the collaboration of the Deutsche Physikalische Gesellschaft by K. Scheel and H. Geiger; Vols 124–141 (1947–1955) by M. v. Laue and R. W. Pohl; Vols 142–203 (1955–1967) by O. Haxel and H. Jensen; Vols 204–258 (1967–1973) by E. Fünfer, O. Haxel, H. Jensen, and G. Leibfried, from Vol. 259 by E. Fünfer, O. Haxel, G. Leibfried, and H. A. Weidenmüller. Vols 129–175 were produced with the collaboration of the Verband Deutscher Physikalischer Gesellschaften; from Vol. 176, the Deutsche Physikalische Gesellschaft. Published: Vols 1–4 (1921) Braunschweig, Fr. Vieweg & Sohn; Vol. 5 onwards, Berlin, Springer.

Starting with Vol. 272 (1975) *Zeitschrift für Physik* has been divided into two separate journals: *Zeitschrift für Physik A (Atoms and Nuclei)* and *Zeitschrift für Physik B (Condensed Matter and Quanta)*. The title *Zeitschrift für Physik B (Condensed Matter and Quanta)* has been changed to *Zeitschrift für Physik B (Condensed Matter)* from Vol. 38 (1980). In 1979 a third section was added: *Zeitschrift für Physik C (Particles and Fields)*. In 1986 *Zeitschrift für Physik D (Atoms, Molecules and Clusters)* was added and the title of *Zeitschrift für Physik A (Atoms and Nuclei)* changed to *Zeitschrift für Physik A (Atomic Nuclei)*.

Copyright Submission of a manuscript implies: that the work described has not been published before (except in the form of an abstract or as part of a published lecture, review, or thesis), that it is not under consideration for publication elsewhere; that its publication has been approved by all coauthors, if any, as well as by the responsible authorities at the institute where the work has been carried out; that, if and when the manuscript is accepted for publication, the authors agree to automatic transfer of the copyright to the publisher; and that the manuscript will not be published elsewhere in any language without the consent of the copyright holders.

All articles published in this journal are protected by copyright, which covers the exclusive rights to reproduce and distribute the article (e.g., as offprints), as well as all translation rights. No material published in this journal may be reproduced photographically or stored on microfilm, in electronic data bases, video disks, etc., without first obtaining written permission from the publisher.

The use of general descriptive names, trade names, trademarks, etc., in this publication, even if not specifically identified, does not imply that these names are not protected by the relevant laws and regulations.

While the advice and information in this journal is believed to be true and accurate at the date of its going to press, neither the authors, the editors, nor the publisher can accept legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Special Regulations for Photocopies in the USA Photocopies may be made for personal or in-house use beyond the limitations stipulated under Section 107 or 108 of U.S. Copyright Law, provided a fee is paid. This fee is US \$0.20 per page, or a minimum of US \$1.00 if an article contains fewer than five pages. All fees should be paid to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA, stating the ISSN 0930-1151, the volume, and first and last page numbers of each article copied. The copyright owner's consent does not include copying for general distribution, promotion, new works, or resale. In these cases, specific written permission must first be obtained from the publisher.

Springer-Verlag Berlin, Heidelberg, New York, Tokyo—Printers: Universitätsdruckerei H. Stürtz AG, D-8700 Würzburg—Printed in Germany
© Springer-Verlag Berlin, Heidelberg 1988—Springer-Verlag GmbH & Co. KG, D-1000 Berlin 33

Contents Volume 330 (1988)

- d'Achard van Enschut, J.F.M., see David, P., et al. 397
- Ackermann, D., see Münzenberg, G., et al. 435
- Alami, R., see Rivet, M.F., et al. 295
- Ali Sameh, A., see Bekk, K., et al. 235
- Allen, K.W., Keddy, R.J., Sellschop, J.P.F., Whittle, B.: The Ground State M1 Strength in ^{40}Ca (Short Note) 117
- Altmeyer, T., Kolbe, E., Warmann, T., Langanke, K., Assenbaum, H.J.: On Discrepancies within the Experimental and Theoretical Low Energy $^3\text{H}(\alpha, \gamma)^7\text{Li}$ Cross Sections 277
- Andrejtscheff, W., see Kostov, L.K., et al. 45
- Angelis, G. de, see Müller-Veggian, M., et al. 343
- Anne, R., see Mueller, A.C., et al. 63
- Armbruster, P., see Münzenberg, G., et al. 435
- Arnell, S.E., Mattsson, S., Roth, H.A., Rydehell, M., Skeppstedt, Ö., Nyberg, J., Johnson, A., Kerek, A., Nilsson, A., Westerberg, L.: Non-Equilibrium Neutron Emission in α -Induced Reactions on ^{124}Sn 69
- Arnold, R., see Hoffmann, D.H.H., et al. 339
- Assenbaum, H.J., see Altmeyer, T., et al. 277
- Bandō, H., Motoba, T., Zofka, J.: Σ -Hypernuclear (π^-, K^+) Production 203
- Bandō, H., see Itonaga, K., et al. 209
- Banes, D.W., see Wyss, R., et al. 123
- Bang, J.M., Flambaum, V.V., Hansteen, J.M.: On e^+e^- Pair Production in Heavy Ion Collisions Through Discharge in the Electron Gas of the United Atom (Short Note) 431
- Barnéoud, D., Blachot, J., Genevey, J., Gizon, A., Béraud, R., Duffait, R., Emsalle, A., Meyer, M., Redon, N., Rolando-Eugio, D.: Beta-Decay of Even-A Neutron-Deficient Pr Isotopes (Short Note) 341
- Barranco, M., see Milian, A., et al. 5
- Barut, A.O., Božić, M.: Passage of Relativistic Magnetic Dipole Moments Through Magnetic Fields 319
- Bastin, G., see Hannachi, F., et al. 15
- Bauer, W., see Maier, K., et al. 173
- Baur, G., Bertulani, C.A.: $\gamma\gamma$ Physics with Peripheral Relativistic Heavy Ion Collisions 77
- Bazin, D., see Mueller, A.C., et al. 63
- Beaudoin, G., see Champagne, A., et al. 377
- Beck, F.A., see Hannachi, F., et al. 15
- Becker, H.W., see Brehm, K., et al. 167
- Bekk, K., Göring, S., Kälber, W., Meisel, G., Rebel, H., Ali Sameh, A.: Determination of the ^{242m}Am Nuclear Moments 235
- Bellini, V., see Julien, J., et al. 83
- Bengtsson, R., see Wyss, R., et al. 123
- Béraud, R., see Barnéoud, D., et al. 341
- Bertulani, C.A., see Baur, G. 77
- Bhattacharya, R.: Utility of a Global Set of Potential Parameters from the Orbit Radii Measurements of Valence Nucleons 1
- Bhuloka Reddy, S., see Chandrasekhar Rao, M.V.S., et al. 161
- Bimbot, R., see Hoffmann, D.H.H., et al. 339
- Blachot, J., see Barnéoud, D., et al. 341
- Bohlen, H.G., Gebauer, B., Kolbert, D., Oertzen, W. v., Stiliaris, E., Wilpert, M., Wilpert, T.: Spectroscopy of ^9He with the ($^{13}\text{C}, ^{13}\text{O}$) Reaction on ^9Be (Short Note) 227
- Boloré, M., see Julien, J., et al. 83
- Bolotin, H.H., see Stuchbery, A.E., et al. 131
- Boneva, S.T., Khitrov, V.A., Popov, Yu.P., Sukhovich, A.M., Vasilieva, E.V., Yazvitsky, Yu.S.: Cascade γ -Decay of Compound-State of the Nuclei ^{163}Dy , ^{167}Er and ^{179}Hf 153
- Borderie, B., see Rivet, M.F., et al. 295
- Borrel, V., see Mueller, A.C., et al. 63
- Bosch, F., see Maier, K., et al. 173
- Boslau, O., see Gauder, R., et al. 423
- Bourgeois, C., see Hannachi, F., et al. 15
- Božić, M., see Barut, A.O. 319
- Braga, R.A., see Kern, B.D., et al. 37
- Brant, S., Sistemich, K., Paar, V., Lhersonneau, G.: Nuclear Structure of ^{97}Y in the Interacting Boson-Fermion Model 365
- Brant, S., see Seyfarth, H., et al. 141
- Brechtmann, C., Heinrich, W.: Fragmentation Cross Sections of ^{16}O at 60 and 200 GeV/Nucleon 407
- Brehm, K., Becker, H.W., Rolf, C., Trautvetter, H.P., Kämpfer, F., Ratynski, W.: The Cross Section of $^{14}\text{N}(n, p)^{14}\text{C}$ at Stellar Energies and its Role as a Neutron Poison for S-Process Nucleosynthesis 167
- Brentano, P. v., see Lieberz, W., et al. 221
- Briggmann, J., see Maier, K., et al. 173
- Brüchle, W., see Wirth, G., et al. 87
- Brügger, M., see Karlewski, T., et al. 55
- Budzanowski, A., see Terlau, W., et al. 303
- Bürgel, M., see Terlau, W., et al. 303

- Byrne, A.P., see Stuchbery, A.E., et al. 131
 Carnoy, A.S., see Girard, T.A., et al. 51
 Carstanjen, H.-D., see Maier, K., et al. 173
 Carter, H.K., see Papanicolopoulos, C.D., et al. 371
 Champagne, A., Beaudoin, G., Hamel, L.A., Jeremie, H., Lessard, L.: Measurement of the Beta Spectrum of the 0^- (120 keV) State of ^{16}N 377
 Chandrasekhar Rao, M.V.S., Venkateswara Rao, N., Bhuloka Reddy, S., Satyanarayana, G., Sastry, D.L., Iyer, M.R., Sahasrabhude, S.G.: Anomalous Conversion of 127 keV E_β Transition in ^{134}Cs 161
 Chanfray, G., see Schuck, P., et al. 119
 Chauvin, J., see Julien, J., et al. 83
 Chubarian, G.G., see Gippner, P., et al. 433
 Coenen, E., see Huyse, M., et al. 121
 Cole, J.D., see Papanicolopoulos, C.D., et al. 371
 Cuypers, F., Levinger, J.S.: How to Build Optimal Subsets of Hyperspherical Harmonics 29
 Dabrowski, H., see Julien, J., et al. 83
 Dange, S.P., see Datta, T., et al. 103
 Datta, T., Dange, S.P., Sahakundu, S.M., Prakash, S., Ramaniah, M.V.: Influence of Collective Rotational Degrees of Freedom in Medium Energy Fission 103
 Dautet, H., see Turcotte, R., et al. 349
 David, P., Hänscheid, H., Hartfiel, J., Janszen, H., Mayer-Kuckuk, T., Mutius, R. v., Risse, F., Rösel, Ch.F.G., Schrieder, W., Petitjean, C., Reist, H.W., Polikanov, S.M., Konijn, J., Laati, C.T.A.M. de, Taal, A., Krogulski, T., Johansson, T., Tibell, G., d'Achard van Enschut, J.F.M., Theobald, J.P., Trautmann, N., Gugler, C., Schaller, L.A., Schellenberg, L.: The Study of Prompt and Delayed Muon Induced Fission II. Mean Life Times of Negative Muons Bound to ^{237}Np , ^{242}Pu and ^{244}Pu 397
 De Saintignon, P., see Julien, J., et al. 83
 Dechant, B., Kuhlmann, E.: Gammatdecay of Quasimolecular Resonances in the $^{12}\text{C} + ^{12}\text{C}$ System 93
 Decker, W., see Maier, K., et al. 173
 Deneffe, K., see Huyse, M., et al. 121
 Desplanques, B.: The Swelling of Nucleons in Nuclei and the Roper Resonance 331
 Deutsch, J., see Girard, T.A., et al. 51
 Deutsch, C., see Hoffmann, D.H.H., et al. 339
 Dewald, A., see Lieberz, W., et al. 221
 Diehl, J., see Maier, K., et al. 173
 Doran, C.E., see Stuchbery, A.E., et al. 131
 Duffait, R., see Barnéoud, D., et al. 341
 Dumail, M., see Hoffmann, D.H.H., et al. 339
 Dunn, M.: Toroidal Quark Matter: Do Discrete Energy Level Corrections Destroy the Dinotor's Metastability? 197
 Emsallem, A., see Barnéoud, D., et al. 341
 Faessler, A., see Rashdan, M., et al. 417
 Feldmann, R., see Maier, K., et al. 173
 Figueroa, A.S., see Julien, J., et al. 83
 Fink, R.W., see Kern, B.D., et al. 37
 Flambaum, V.V., see Bang, J.M., et al. 431
 Fleurier, C., see Hoffmann, D.H.H., et al. 339
 Folger, H., see Münzenberg, G., et al. 435
 Fonte, R., see Julien, J., et al. 83
 Freund, S., see Lieberz, W., et al. 221
 Frisk, H.: Systematics of Rotational Bands with $K=0$ in Odd-Odd Nuclei 241
 Fromm, W.D., see Kotte, R., et al. 189
 Fuchs, H., see Rivet, M.F., et al. 295
 Fuchs, H., see Terlau, W., et al. 303
 Fujita, Y., see Münzenberg, G., et al. 435
 Fujiwara, H., see Ikezoe, H., et al. 289
 Funke, F., see Wirth, G., et al. 87
 Funke, L., see Kostov, L.K., et al. 45
 Gabelmann, H., see Kratz, K.-L., et al. 229
 Gardes, D., see Rivet, M.F., et al. 295
 Gardès, D., see Hoffmann, D.H.H., et al. 339
 Gauder, R., Speller, F., Zierer, U., Boslau, O., Hilscher, A., Hoffmann, K.-W.: Measurement of the Longitudinal Electron Polarization in Nuclear Beta-Decay 423
 Gauvin, H., see Rivet, M.F., et al. 295
 Gebauer, B., see Bohlen, H.G., et al. 227
 Gelberg, A., see Lieberz, W., et al. 221
 Genevey, J., see Barnéoud, D., et al. 341
 Gerber, J., see Simonis, H.-J., et al. 361
 Ghosh, A., see Ghosh, D., et al. 311
 Ghosh, D., Roy, J., Ghosh, A., Mukhopadhyay, A.: Directional Poissonic Multiplicity Distribution of Protons – Indication of Side Splash Phenomenon 311
 Gippner, P., Schilling, K.D., Stary, F., Will, E., Heidel, K., Lukyanov, S.M., Penionzhkevich, Yu.E., Salamatin, V.S., Sodan, H., Chubarian, G.G., Schmidt, R.: On the Evolution of the Mass Asymmetry in Damped Heavy-Ion Collisions (Short Note) 433
 Girard, T.A., Carnoy, A.S., Deutsch, J., Prieels, R., Schmit, M.L.: The Polarization of Positrons in the Decay of ^{14}O 51
 Gizon, A., see Barnéoud, D., et al. 341
 Gollerthan, U., see Münzenberg, G., et al. 435
 Göring, S., see Bekt, K., et al. 235
 Göttel, P., see Seyfarth, H., et al. 141
 Granderath, A., see Lieberz, W., et al. 221
 Greiner, W., see Heuer, R., et al. 315
 Greiner, W., see Rohozinski, S.G., et al. 23
 Grimm, M.A., see Papanicolopoulos, C.D., et al. 371
 Guerreau, D., see Mueller, A.C., et al. 63
 Gugler, C., see David, P., et al. 397
 Guillemaud-Mueller, D., see Mueller, A.C., et al. 63
 Güven, H., Julin, R., Lach, M., Styczen, J., Müller-Veggian, M., Krämer-Flecken, A., Kleinheinz, P.: Proton- and Neutron $h_{11/2}$ Excitations in $^{141}\text{Eu}_{78}$ 437
 Güven, H., see Müller-Veggian, M., et al. 343
 Haas, R., see Hoffmann, D.H.H., et al. 339
 Hagelberg, F., see Simonis, H.-J., et al. 361
 Hamel, L.A., see Champagne, A., et al. 377
 Hanelt, E., see Münzenberg, G., et al. 435
 Hannachi, F., Bastin, G., Porquet, M.G., Thibaud, J.P., Bourgeois, C., Hildingsson, L., Perrin, N., Sergolle, H., Beck, F.A., Merdinger, J.C.: Collective Structures in ^{185}Hg 15
 Hänscheid, H., see David, P., et al. 397
 Hansteen, J.M., see Bang, J.M., et al. 431
 Hartfiel, J., see David, P., et al. 397
 Hebbinghaus, G., see Müller-Veggian, M., et al. 343
 Heidel, K., see Gippner, P., et al. 433
 Heinrich, W., see Brechtmann, C. 407
 Hentschel, E., see Kotte, R., et al. 189
 Herrmann, G., see Karlewski, T., et al. 55
 Heßberger, F.P., see Münzenberg, G., et al. 435
 Heuer, R., Müller, B., Stöcker, H., Greiner, W.: Coherent Photon Production in Heavy-Ion Collisions at Intermediate Energies 315
 Hildebrand, N., see Karlewski, T., et al. 55
 Hildingsson, L., see Hannachi, F., et al. 15
 Hilscher, A., see Gauder, R., et al. 423
 Hinde, D.J., see Ikezoe, H., et al. 289
 Hisleur, J.M., see Julien, J., et al. 83
 Hoffmann, D.H.H., Weyrich, K., Wahl, H., Peter, Th., Meyer-ter-Vehn, J., Jacoby, J., Bimbot, R., Gardès, D., Rivet, M.F., Dumail, M., Fleurier, C., Sanba, A., Deutsch, C., Maynard, G., Noll, R., Haas, R., Arnold, R., Maurmann, S.: Experimental Observation of Enhanced Stopping of Heavy Ions in a Hydrogen Plasma (Short Note) 339
 Hoffmann, K.-W., see Gauder, R., et al. 423
 Hoffmann, S., see Münzenberg, G., et al. 435
 Homeyer, H., see Terlau, W., et al. 303
 Hosaka, A., Toki, H.: Pion Fluctuation Around the Hedgehog Solution in the Chiral Bag plus Skyrmion Hybrid Model 111
 Huyse, M., Marmol, P. del, Coenen, E., Deneffe, K., Van Duppen, P., Vanhorenbeeck, J.: Decay Study of Neutron-Deficient ^{101}In (Short Note) 121
 Ideno, K., see Ikezoe, H., et al. 289
 Ikezoe, H., Shikazono, N., Tomita, Y., Sugiyama, Y., Ideno, K., Yokota, W., Nagame, Y., Lee, S.M., Ogihara, M., Jeong, S.C., Fujiwara, H., Hinde, D.J.: Mass Distribution of Fission Fragments in the $^{19}\text{F} + ^{197}\text{Au}$ Reaction 289
 Insolita, A., see Julien, J., et al. 83
 Ismail, M., see Rashdan, M., et al. 417
 ISOLDE Collaboration, see Kratz, K.L., et al. 229
 Itonaga, K., Motoba, T., Bandō, H.: Pi-Meson Decay of Hypernuclei and Pion Wavefunction 209
 Iyer, M.R., see Chandrasekhar Rao, M.V.S., et al. 161
 Jacmart, J.C., see Mueller, A.C., et al. 63
 Jacoby, J., see Hoffmann, D.H.H., et al. 339
 Janszen, H., see David, P., et al. 397
 Jeong, S.C., see Ikezoe, H., et al. 289
 Jeremie, H., see Champagne, A., et al. 377
 Johansson, T., see David, P., et al. 397
 Johnson, A., see Arnell, S.E., et al. 69
 Johnson, A., see Wyss, R., et al. 123
 Julien, J., Boloré, M., Dabrowski, H.,

- Hisleur, J.M., Bellini, V., Figuera, A.S., Fonte, R., Insolia, A., Palama, G.F., Russo, G.V., Sperduto, M.L., Chauvin, J., De Saintignon, P., Lebrun, D., Rebreyend, D.: Neutral Pion Production in Subthreshold Heavy Ion Collision with ^{16}O (38 MeV/u) and ^{20}Ne (200 MeV/u) Beams 83
- Julin, R., see Güven, H., et al. 437
- Kaffrell, N., see Karlewski, T., et al. 55
- Kälber, W., see Bekk, K., et al. 235
- Käppeler, F., see Brehm, K., et al. 167
- Karle, W., see Simonis, H.-J., et al. 361
- Karlewski, T., Hildebrand, N., Brügger, M., Kaffrell, N., Trautmann, N., Herrmann, G.: Beta-Decay of $^{148,150,152}\text{Pr}$ into Levels of $^{148,150,152}\text{Nd}$ 55
- Käubler, L., see Kostov, L.K., et al. 45
- Kawase, Y., Okano, K.: Identification of a New Isotope ^{154}Pr (Short Note) 231
- Keddy, R.J., see Allen, K.W., et al. 117
- Kerek, A., see Arnell, S.E., et al. 69
- Kern, B.D., Mlekodaj, R.L., Kortelahti, M.O., Braga, R.A., Fink, R.W.: Energy Levels of ^{136}Pm and ^{136}Nd via Beta Decay of ^{136}Sm and ^{136}Pm 37
- Keyerleber, B., see Maier, K., et al. 173
- Khitrov, V.A., see Boneva, S.T., et al. 153
- Kihm, Th., see Spahn, M., et al. 345
- Kilgus, U., see Simonis, H.-J., et al. 361
- Kirwan, A., see Wyss, R., et al. 123
- Kleinheinz, P., see Güven, H., et al. 437
- Kleinheinz, P., see Müller-Veggian, M., et al. 343
- Knöpfle, K.T., see Spahn, M., et al. 345
- Knopp, M., see Simonis, H.-J., et al. 361
- Koester, L., Waschkowski, W., Meier, J., Rau, G., Salehi, M.: Experimental Study on p -Wave Neutron Strength Functions for Light Nuclei 387
- Kolbe, E., see Altmeyer, T., et al. 277
- Kolbert, D., see Bohlen, H.G., et al. 227
- Konijn, J., see David, P., et al. 397
- Kortelahti, M.O., see Kern, B.D., et al. 37
- Kortelahti, M.O., see Papanicopoloulos, C.D., et al. 371
- Kostov, L.K., Andrejtscheff, W., Kostova, L.G., Petkov, P., Funke, L., Käubler, L., Prade, H.: Multiplet Structure and Core-Related Effects on Transition Rates in ^{87}Y and Neighbouring $A \approx 90$ Nuclei 45
- Kostova, L.G., see Kostov, L.K., et al. 45
- Kotte, R., Fromm, W.D., Hentschel, E., Ortlepp, H.G., Schilling, K.D., Seidel, W., Stary, F., Zwicker, G.: In-Beam Investigation of Ternary Fission 189
- Krämer-Flecken, A., see Güven, H., et al. 437
- Kratz, J.V., see Wirth, G., et al. 87
- Kratz, K.-L., Gabelmann, H., Pfeiffer, B., Möller, P., ISOLDE Collaboration: Onset of Deformation in Neutron-Rich Krypton Isotopes (Short Note) 229
- Kratz, K.-L., see Lhersonneau, G., et al. 347
- Krogulski, T., see David, P., et al. 397
- Kuhlmann, E., see Dechant, B. 93
- Laat, C.T.A.M. de, see David, P., et al. 397
- Lach, M., see Güven, H., et al. 437
- Lach, M., see Müller-Veggian, M., et al. 343
- Lampard, G.J., see Stuchbery, A.E., et al. 131
- Langanke, K., see Altmeyer, T., et al. 277
- Lattuada, M., Riggi, F., Vinciguerra, D., Spitaleri, C., Vourvopoulos, G., Miljanić, D., Norbeck, E.: Energy Dependence of Direct Effects in the $^6\text{Li} + ^6\text{Li} \rightarrow 3\alpha$ Reaction Around the Coulomb Barrier 183
- Lebrun, D., see Julien, J., et al. 83
- Lee, S.M., see Ikezoe, H., et al. 289
- Leino, M.E., see Münzenberg, G., et al. 435
- Lessard, L., see Champagne, A., et al. 377
- Levinger, J.S., see Cuypers, F. 29
- Lhersonneau, G., Pfeiffer, B., Kratz, K.-L., Ohm, H., Sistemich, K.: Shape Coexistence in the $N = 59$ Isotone ^{97}Sr (Short Note) 347
- Lhersonneau, G., see Brant, S., et al. 365
- Lidén, F., see Wyss, R., et al. 123
- Lieberz, W., Freund, S., Granderath, A., Gelberg, A., Dewald, A., Reinhardt, R., Wirowski, R., Zell, K.O., Brentano, P. v.: High Spin States in ^{126}Xe (Short Note) 221
- Linden, R., see Rashdan, M., et al. 417
- Lombard, R.J., see Milian, A., et al. 5
- Love, D.J.G., see Wyss, R., et al. 123
- Lukyanov, S.M., see Gippner, P., et al. 433
- Maden, D., see Maier, K., et al. 173
- Maier, K., Widmann, E., Bauer, W., Bosch, F., Briggmann, J., Carstensen, H.-D., Decker, W., Diehl, J., Feldmann, R., Keyerleber, B., Maden, D., Major, J., Schaefer, H.-E., Seeger, A., Stoll, H.: Evidence for a Resonance in Positron-Electron Scattering at 810 keV Centre-of-Mass Energy 173
- Major, J., see Maier, K., et al. 173
- Manakos, P., Mannel, T.: Short Note on Relativistic Hartree Fock Models for Nuclei with Skyrme Type Interactions (Short Note) 223
- Mannel, T., see Manakos, P. 223
- Mark, S.K., see Turcotte, R., et al. 349
- Marmol, P. del, see Huysse, M., et al. 121
- Maruhn, J.A., see Rohozinski, S.G., et al. 23
- Mas, D., see Milian, A., et al. 5
- Mattsson, S., see Arnell, S.E., et al. 69
- Maurmann, S., see Hoffmann, D.H.H., et al. 339
- Mayer-Kuckuk, T., see David, P., et al. 397
- Maynard, G., see Hoffmann, D.H.H., et al. 339
- Meier, J., see Koester, L., et al. 387
- Meisel, G., see Bekk, K., et al. 235
- Merdinger, J.C., see Hannachi, F., et al. 15
- Meyer, M., see Barnéoud, D., et al. 341
- Meyer-ter-Vehn, J., see Hoffmann, D.H.H., et al. 339
- Milek, B., Reif, R.: Nuclear Elastoplasticity and Precompound Particle Emission in Heavy-Ion Reactions (Short Note) 225
- Milian, A., Barranco, M., Mas, D., Lombard, R.J.: Nuclear Collective States at Finite Temperature 5
- Miljanić, D., see Lattuada, M., et al. 183
- Mlekodaj, R.L., see Kern, B.D., et al. 37
- Möller, P., see Kratz, K.-L., et al. 229
- Morawek, W., see Münzenberg, G., et al. 435
- Motoba, T., see Bandō, H., et al. 203
- Motoba, T., see Itonaga, K., et al. 209
- Mueller, A.C., Bazin, D., Schmidt-Ott, W.D., Anne, R., Guerreau, D., Guillemaud-Mueller, D., Saint-Laurent, M.G., Borrel, V., Jacmart, J.C., Pougheon, F., Richard, A.: β -Delayed Neutron Emission of ^{15}B , ^{18}C , $^{19,20}\text{N}$, $^{34,35}\text{Al}$ and ^{39}P 63
- Mukhopadhyay, A., see Ghosh, D., et al. 311
- Müller, B., see Heuer, R., et al. 315
- Müller-Veggian, M., Zuber, K., Güven, H., Angelis, G. de, Styczen, J., Lach, M., Hebbinghaus, G., Kleinheinz, P.: In-Beam Study of $^{143}\text{Eu}_{80}$ (Short Note) 343
- Müller-Veggian, M., see Güven, H., et al. 437
- Münzenberg, G., Hofmann, S., Heßberger, F.P., Folger, H., Ninov, V., Poppensieker, K., Quint, A.B., Reisdorf, W., Schött, H.-J., Sümmerer, K., Armbruster, P., Leino, M.E., Ackermann, D., Gollert, U., Hanelt, E., Morawek, W., Fujita, Y., Schwab, T., Türler, A.: New Results on Element 109 435
- Mutius, R. v., see David, P., et al. 397
- Nagame, Y., see Ikezoe, H., et al. 289
- Nelson, A.H., see Wyss, R., et al. 123
- Nilsson, A., see Arnell, S.E., et al. 69
- Ninov, V., see Münzenberg, G., et al. 435
- Noll, R., see Hoffmann, D.H.H., et al. 339
- Norbeck, E., see Lattuada, M., et al. 183
- Nörenberg, W., see Schuck, P., et al. 119
- Nyberg, J., see Arnell, S.E., et al. 69
- Nyberg, J., see Wyss, R., et al. 123
- Oberacker, V.E., see Wirth, G., et al. 87
- Oertzen, W. v., see Bohlen, H.G., et al. 227
- Ogihara, M., see Ikezoe, H., et al. 289
- Ohm, H., see Lhersonneau, G., et al. 347
- Ohtsuka, N., see Rashdan, M., et al. 417
- Okano, K., see Kawase, Y. 231
- Ortlepp, H.G., see Kotte, R., et al. 189
- Paar, V., see Brant, S., et al. 365
- Paar, V., see Seyfarth, H., et al. 141
- Palama, G.F., see Julien, J., et al. 83
- Papanicopoloulos, C.D., Grimm, M.A., Wood, J.L., Zganjar, E.F., Kortelahti, M.O., Cole, J.D., Carter, H.K.: Very Converted Transitions and Particle-Core Coupling in Neutron-Deficient Odd-Mass Au Isotopes 371
- Penionzhkevich, Yu.E., see Gippner, P., et al. 433
- Perrin, N., see Hannachi, F., et al. 15
- Peter, Th., see Hoffmann, D.H.H., et al. 339
- Petitjean, C., see David, P., et al. 397
- Petkov, P., see Kostov, L.K., et al. 45
- Pfeiffer, B., see Kratz, K.-L., et al. 229
- Pfeiffer, B., see Lhersonneau, G., et al. 347
- Polikanov, S.M., see David, P., et al. 397
- Popov, Yu.P., see Boneva, S.T., et al. 153
- Poppensieker, K., see Münzenberg, G., et al. 435
- Porquet, M.G., see Hannachi, F., et al. 15
- Pougheon, F., see Mueller, A.C., et al. 63
- Prade, H., see Kostov, L.K., et al. 45

- Prakash, S., see Datta, T., et al. 103
 Prieels, R., see Girard, T.A., et al. 51
 Quint, A.B., see Münzenberg, G., et al. 435
 Ramaniah, M.V., see Datta, T., et al. 103
 Rashdan, M., Faessler, A., Ohtsuka, N., Linden, R., Wadia, W., Ismail, M.: The Effect of Nuclear and Coulomb Interactions on the Nuclear Shapes of Two Colliding ^{208}Pb Nuclei 417
 Ratynski, W., see Brehm, K., et al. 167
 Rau, G., see Koester, L., et al. 387
 Rebel, H., see Bekk, K., et al. 235
 Rebreyend, D., see Julien, J., et al. 83
 Redon, N., see Barnéoud, D., et al. 341
 Reif, R., see Milek, B. 225
 Reinhardt, R., see Lieberz, W., et al. 221
 Reisdorf, W., see Münzenberg, G., et al. 435
 Reist, H.W., see David, P., et al. 397
 Richard, A., see Mueller, A.C., et al. 63
 Richert, J., Wagner, P.: Decay Process of Excited Fragments in $^{40}\text{Ar} + ^{13}\text{C}$ at 27.5 MeV/A 283
 Riggi, F., see Lattuada, M., et al. 183
 Risse, F., see David, P., et al. 397
 Rivet, M.F., Alami, R., Borderie, B., Fuchs, H., Gardes, D., Gauvin, H.: Fusion-Fission of Heavy Systems. Influence of the Entrance Channel Mass Asymmetry 295
 Rivet, M.F., see Hoffmann, D.H.H., et al. 339
 Rohozinski, S.G., Troltenier, D., Maruhn, J.A., Greiner, W.: The Collective 1^+ State in Triaxial Nuclei 23
 Rolando-Eugio, D., see Barnéoud, D., et al. 341
 Rolfs, C., see Brehm, K., et al. 167
 Röschert, G., see Terlau, W., et al. 303
 Rösel, Ch.F.G., see David, P., et al. 397
 Roth, H.A., see Arnell, S.E., et al. 69
 Roy, J., see Ghosh, D., et al. 311
 Russo, G.V., see Julien, J., et al. 83
 Rydehell, M., see Arnell, S.E., et al. 69
 Sahakundu, S.M., see Datta, T., et al. 103
 Sahasrabhude, S.G., see Chandrasekhar Rao, M.V.S., et al. 161
 Saint-Laurent, M.G., see Mueller, A.C., et al. 63
 Salamatin, V.S., see Gippner, P., et al. 433
 Salehi, M., see Koester, L., et al. 387
 Sanba, A., see Hoffmann, D.H.H., et al. 339
 Sastry, D.L., see Chandrasekhar Rao, M.V.S., et al. 161
 Sato, K., Yoshida, S.: Studies of Nuclear Second Moments for Pre-Equilibrium Nuclear Reaction Theories - Extension to Finite-Range Residual Interaction 265
 Satyanarayana, G., see Chandrasekhar Rao, M.V.S., et al. 161
 Schaefer, H.-E., see Maier, K., et al. 173
 Schaller, L.A., see David, P., et al. 397
 Schellenberg, L., see David, P., et al. 397
 Schilling, K.D., see Gippner, P., et al. 433
 Schilling, K.D., see Kotte, R., et al. 189
 Schmidt, R., see Gippner, P., et al. 433
 Schmidt-Ott, W.D., see Mueller, A.C., et al. 63
 Schmit, M.L., see Girard, T.A., et al. 51
 Schött, H.-J., see Münzenberg, G., et al. 435
 Schrieder, W., see David, P., et al. 397
 Schuck, P., Nörenberg, W., Chanfray, G.: Bound Two-Pion Cooper Pairs in Nuclei? (Short Note) 119
 Schürmann, B., see Zwermann, W. 233
 Schwab, T., see Münzenberg, G., et al. 435
 Seeger, A., see Maier, K., et al. 173
 Seidel, W., see Kotte, R., et al. 189
 Sellschop, J.P.F., see Allen, K.W., et al. 117
 Sergolle, H., see Hannachi, F., et al. 15
 Seyfarth, H., Brant, S., Göttel, P., Paar, V., Vorkapić, D., Vretenar, D.: Low-Lying States and Degree of Chaoticity of ^{40}K in IBFFM 141
 Shikazono, N., see Ikezoe, H., et al. 289
 Simonis, H.-J., Hagelberg, F., Speidel, K.-H., Knopp, M., Karle, W., Kilgus, U., Gerber, J.: Measurements of Lifetime and g -Factor of the $^{32}\text{S}(4_1^+)$ State at 4.459 MeV 361
 Simpson, J., see Wyss, R., et al. 123
 Sistemich, K., see Brant, S., et al. 365
 Sistemich, K., see Lhersonneau, G., et al. 347
 Skeppstedt, Ö., see Arnell, S.E., et al. 69
 Sodan, H., see Gippner, P., et al. 433
 Spahn, M., Kihm, Th., Knöpfle, K.T.: Multipole Analysis of $(e, e'\alpha_0)$ Angular Correlations (Short Note) 345
 Speidel, K.H., see Simonis, H.-J., et al. 361
 Speller, F., see Gauder, R., et al. 423
 Sperduto, M.L., see Julien, J., et al. 83
 Spitaleri, C., see Lattuada, M., et al. 183
 Stary, F., see Gippner, P., et al. 433
 Stary, F., see Kotte, R., et al. 189
 Stiliaris, E., see Bohlen, H.G., et al. 227
 Stöcker, H., see Heuer, R., et al. 315
 Stoll, H., see Maier, K., et al. 173
 Stuchbery, A.E., Bolotin, H.H., Byrne, A.P., Doran, C.E., Lampard, G.J.: Disparity in Transient Field Characteristics for Au Ions Traversing Fe and Gd Hosts Through Measurements of g -Factors in ^{197}Au 131
 Styczen, J., see Güven, H., et al. 437
 Styczen, J., see Müller-Veggian, M., et al. 343
 Sugiyama, Y., see Ikezoe, H., et al. 289
 Sukhovoij, A.M., see Boneva, S.T., et al. 153
 Sümmerer, K., see Münzenberg, G., et al. 435
 Sümmerer, K., see Wirth, G., et al. 87
 Taal, A., see David, P., et al. 397
 Terlau, W., Bürgel, M., Budzanowski, A., Fuchs, H., Homeyer, H., Röschert, G., Uckert, J., Vogel, R.: Incomplete Deep-Inelastic Scattering in $^{20}\text{Ne} + ^{197}\text{Au}$ Collisions at 20 MeV/Nucleon 303
 Theobald, J.P., see David, P., et al. 397
 Thibaud, J.P., see Hannachi, F., et al. 15
 Tibell, G., see David, P., et al. 397
 Toki, H., see Hosaka, A. 111
 Tomita, Y., see Ikezoe, H., et al. 289
 Trautmann, N., see David, P., et al. 397
 Trautmann, N., see Karlewski, T., et al. 55
 Trautmann, N., see Wirth, G., et al. 87
 Trautvetter, H.P., see Brehm, K., et al. 167
 Troltenier, D., see Rohozinski, S.G., et al. 23
 Turcotte, R., Dautet, H., Mark, S.K.: States in $N=79$ ^{142}Eu Populated in the Decay of ^{142}Gd 349
 Türlér, A., see Münzenberg, G., et al. 435
 Uckert, J., see Terlau, W., et al. 303
 Van Duppen, P., see Huyse, M., et al. 121
 Vanhorenbeeck, J., see Huyse, M., et al. 121
 Vasilieva, E.V., see Boneva, S.T., et al. 153
 Venkateswara Rao, N., see Chandrasekhar Rao, M.V.S., et al. 161
 Vinciguerra, D., see Lattuada, M., et al. 183
 Vogel, R., see Terlau, W., et al. 303
 Vorkapić, D., see Seyfarth, H., et al. 141
 Vourvopoulos, G., see Lattuada, M., et al. 183
 Vretenar, D., see Seyfarth, H., et al. 141
 Wadia, W., see Rashdan, M., et al. 417
 Wagner, P., see Richert, J. 283
 Wahl, H., see Hoffmann, D.H.H., et al. 339
 Warmann, T., see Altmeyer, T., et al. 277
 Waschkowski, W., see Koester, L., et al. 387
 Weber, F., Weigel, M.K.: Relativistic Nuclear and Neutron Matter at Finite Temperatures 249
 Weigel, M.K., see Weber, F. 249
 Westerberg, L., see Arnell, S.E., et al. 69
 Weyrich, K., see Hoffmann, D.H.H., et al. 339
 Whittle, B., see Allen, K.W., et al. 117
 Widmann, E., see Maier, K., et al. 173
 Will, E., see Gippner, P., et al. 433
 Wilpert, M., see Bohlen, H.G., et al. 227
 Wilpert, T., see Bohlen, H.G., et al. 227
 Wirowski, R., see Lieberz, W., et al. 221
 Wirth, G., Brüche, W., Wo, F., Sümmerer, K., Funke, F., Kratz, J.V., Trautmann, N., Oberacker, V.E.: Fission in $^{238}\text{U} + ^{238}\text{U}$ Collisions Below the Coulomb Barrier 87
 Wo, F., see Wirth, G., et al. 87
 Wood, J.L., see Papanicolaopolos, C.D., et al. 371
 Wyss, R., Lidén, F., Nyberg, J., Johnson, A., Love, D.J.G., Nelson, A.H., Baner, D.W., Simpson, J., Kirwan, A., Bengtsson, R.: High Spin Spectroscopy of ^{123}Ba and Alignment Processes for $A \sim 120$ (Short Note) 123
 Yazvitsky, Yu.S., see Boneva, S.T., et al. 153
 Yokota, W., see Ikezoe, H., et al. 289
 Yoshida, S., see Sato, K. 265
 Zell, K.O., see Lieberz, W., et al. 221
 Zganjar, E.F., see Papanicolaopolos, C.D., et al. 371
 Zierer, U., see Gauder, R., et al. 423
 Zofka, J., see Bandō, H., et al. 203
 Zuber, K., see Müller-Veggian, M., et al. 343
 Zwermann, W., Schürmann, B.: Subthreshold K^- Production in Heavy Ion Collisions: No Evidence of Collective Phenomena as yet (Short Note) 233
 Zwicker, G., see Kotte, R., et al. 189

Indexed in *Current Contents*
 Evaluated and abstracted
 for PHYS on STN